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THE PROCTER & GAMBLE COMPANY			ACQUAH, SAMUEL A	
INTELLECTUAL PROPERTY DIVISION WINTON HILL TECHNICAL CENTER - BOX 161			ART UNIT	PAPER NUMBER
6110 CENTER HILL AVENUE			1711	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No.

Application Number: 10/058,520 Filing Date: January 28, 2002 Appellant(s): HOWIE ET AL.

MAILED

APR 2 2 2004

CARL J. ROOF For Appellant GROUP 1700

#### **EXAMINER'S ANSWER**

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

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A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

### (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

### (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is correct.

## (7) Grouping of Claims

The rejection of claims 1-28 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

## (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct. stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

## (9) Prior Art of Record

3,963,699

RIZZI et al

06-1976

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4,517,360

**VOLPENHEIN** 

05-1985

#### (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Rizzi et al, and Volpenhein. This rejection is set forth in prior Office Actions as shown in the final rejection.

#### (11) Response to Argument

Appellants basically argue that the cited prior arts do not anticipate the claims at issue herein because neither reference discloses process conditions of temperature and pressure sufficient to maintain a substantially constant reflux rate – an important feature of the claims.

Appellants indicate that claims 1-28 stand or fall together: Claim 1 is representative and recites:

"A process for the preparation of polyol fatty acid polyester, comprising heating a mixture of polyol, fatty acid ester, emulsifying agent and catalyst under conditions sufficient to cause reaction of the polyol fatty acid ester, wherein the fatty acid chains of the fatty acid ester have from about 6 to about 14 total carbon atoms, wherein the emulsifying agent comprises a fatty acid soap having fatty acid chains of from about 16 to about 22 carbon atoms, and wherein the mixture is heated at a pressure sufficient to maintain a substantially constant reflux rate of the fatty acid ester during the reaction of the polyol and fatty acid ester".

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Rizzi et al and Volpenhein, which are common-owned, and disclose similar processes, disclose and claim a process for the preparation of a polyol fatty acid polyester, comprising heating a mixture of a polyol, a fatty acid lower alkyl ester, an alkali metal fatty acid soap (an emulsifying agent), and a basic catalyst to form a homogeneous melt, and subsequently adding to the reaction product excess fatty acid lower alkyl esters to yield polyol fatty acid polyesters. See the abstract and columns 2-5 of Rizzi and columns 2-4 of Volpenhein.

Regarding the reactants, Rizzi discloses in column 3, line 36 et seq., that "Preferred carbohydrates and sugar alcohols suitable for use herein include, for example...sucrose...As used herein, the term 'fatty acid lower alkyl esters' is intended to include the C<sub>1</sub> and C<sub>2</sub> esters of fatty acids containing about 8 or more carbon atoms... As used herein, the term 'alkali metal fatty acid soap' is intended to include the alkali metal salts of saturated and unsaturated fatty acids having from about 8 to about 18 carbon atoms " (emphasis added). The claims at issue require fatty acid lower alkyl esters wherein the fatty acid has 6-14 carbon atoms, and an emulsifying agent or fatty acid soap wherein the fatty acid has 16-22 carbon atoms.

With regards to the processing conditions, Appellants argue that the important feature of the claims is the reaction of the reactants at a temperature and pressure that would provide a constant reflux rate. Even though claim 1 does not recite the specific temperature and pressure, the specification at page 11, beginning with line 3 indicate that:

In either the one step or the two step process, the reaction mixture Is heated to a temperature sufficient to facilitate reaction of the polyol and the fatty acid ester. In one embodiment, the reaction is heated to a

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temperature of at least 115°C. In another embodiment, the reaction mixture is heated to a temperature in the range from about 115°C to about 150°C. In another embodiment, the reaction mixture is heated to a Temperature in the range from about 120°C to about 140°C, while in yet another embodiment the reaction mixture is heated to a temperature of about 135°C.

The reaction mixture is heated under a pressure sufficient to facilitate the reaction...In embodiment, the pressure is sufficient to reflux excess fatty acid esters during the reaction...the reaction mixture is heated under a pressure sufficient to maintain a substantially constant reflux rate of the fatty acid ester..."substantially constant reflux rate" is intended to mean...from about 5 mm to about 300 mm Hg.

In this regard, attention is herein directed to claim 1 of the patents wherein the temperature is from 110°C to about 180°C and the pressure is from about 0.1 mm Hg to about 760 mm Hg. It is the Examiner's position that under these process conditions, the claimed feature of constant reflux would be inherent in the patent process. See also EXAMPLES I-III in the cited prior arts.

Thus, it is the Examiner's position that the cited prior arts clearly disclose the claimed limitations, including those of the dependent claims.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

S.A.A. April 18, 2004

Conferees
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